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Effect of Macroeconomic Variables on the Performance of the Nigerian Capital Market

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Abstract

The capital market as a veritable engine of development has attracted discussions among scholars. This paper reviewed the findings of several studies on the effect of the macroeconomic variables on the performance of the capital market in Nigeria. Content study was used where the findings of several other studies were reviewed to identify any consensus or divergence on the findings. The findings indicate a positive and significant relationship between the variables of aggregate money supply and Gross Domestic Product on one hand and the development of the capital market in Nigeria. Interest rates and inflation were shown to have negative and significant effect. Findings on the effect of the exchange rate were divergent and, therefore inconclusive. It was recommended that governments at all levels should make concerted efforts to tame corruption and provide infrastructures to improve business activities as well as effectively manage inflation and interest rates through appropriate policies.

Keywords: Macroeconomic Variables, Performance, Capital Market

1. INTRODUCTION

Capital Markets, all over the world has aided significantly in the development and sustenance of most economies today. They have provided a rallying point where governments, businesses and other individuals looking to raise capital can meet investors who can meet their needs. This then leads to economic development and prosperity through the funding of projects which provide necessary goods and services. The capital market is composed of primary and secondary markets where different financial instruments for fundraising are provided, depending on the arrangement between the creditors and debtors (Falaye et al, 2021). These instruments include debt instruments or bonds, equity or common stock, preferred shares and derivatives. The initial two instruments will be discussed below as they are in the most common capital markets.

Debt instruments or bonds are primarily sold in the bond market which is one of the most common capital markets. Bonds are in essence fixed-term loans which can be issued by governments and corporations and must be paid back to the lender at the end of the maturity period. Such loans can have varying characteristics in terms of their length of maturity and the interest paid back. (Investopedia, 2023)

Another common capital market is the stock market which provides a place for governments and corporations to raise equity capital to fund their projects and a place for shares to be bought and sold between investors. Equity is often seen as an infusion of capital into the business in exchange for an ownership stake in the company. The key differences between bonds and stocks/equities are that stocks are inherently riskier than bonds and hence require a larger return and also that in the case of a default by the company, the bondholders will be paid in full before the stockholders. Hence, the stock market serves a significant function by bringing together investors with potential investment opportunities. Other functions of the stock market include provision of liquidity, investment risk reduction due to provision of portfolio diversification opportunities amongst others.

The advancement of the capital market in Nigeria has a significant role in the development, of the equity market. The Nigerian Stock Exchange has been the primary indicator of the growth as well as the performance of the capital markets. It provides additional information about the market capitalization and other indicators (Adekunle, 2016).

The macroeconomic conditions have had far-reaching effects on the growth of the Nigerian economy as a whole. Nigeria recently experienced a notable escalation in the rate of inflation due to the removal of the costly fuel subsidy. This led to a significant rise in the cost of living, increase in unemployment and other significant societal issues. Due to the increasing cost of transportation, many businesses were forced to shut down or take excessive losses and there was a contraction in the overall production of the economy. The capital market was significantly impacted by this, due to the fact that less people would be interested in investing large sums of money in business enterprises when they can barely afford to eat. This suggests that the potential of the stock market to exert the required effect on the development of any economy is diminished by manipulative practices (Akinmade et al, 2020).

1.1 Statement of the Problem

An understanding of the role of economic variables on the performance of the market will bring to the attention of policy makers and capital market practitioners the need for proper management of these variables. The lack of this awareness could explain the recklessness with which policy makers manage these variables. This paper attempts to bring out the effect of macroeconomic variables on the performance of the capital market.

1.2 Research Questions

The central research question for this study: Is there any significant effect of macroeconomic variables on the performance of the Nigerian capital market? To operationalize this, the following questions are raised:

i. Do interest rates have any significant effect on the performance of the Nigerian Stock Exchange?

ii. What is the extent of the effect the exchange rate has on the performance of the Nigerian Stock Exchange?

iii. Does the inflation rate have any significant effect on the performance of the Nigerian Stock Exchange?

iv. Is there any significant effect of the money supply on the performance of the Nigerian Stock Exchange?

v. Does the gross domestic product have any significant effect on the performance of the Nigerian Stock Exchange?

1.3 Research Objectives

This study's central objective is to uncover the effect of macroeconomic variables on the performance of the Nigerian capital market. To achieve this the operational objectives are to:

i. Assess the effect of interest rates on the performance of the Nigerian Stock Exchange.

ii. Examine the effect of the exchange rate on the performance of the Nigerian Stock Exchange.

iii. Analyse the effect of the inflation rate on the performance of the Nigerian Stock Exchange.

iv. Determine the effect of the money supply on the performance of the Nigerian Stock Exchange.

v. Assess the effect of the gross domestic product on the performance of the Nigerian Stock Exchange.

2. CONCEPTUAL REVIEW

2.1 Interest Rates

The rate of interest is essentially the amount demanded by a lender to a borrower for using their capital. (Investopedia,2024). Interest rates are often categorized as either nominal or real. Nominal interest rates often measure the yield of money in a particular time frame while the real interest rates take into account the effect of inflation on the yield of money and adjusts this accordingly.

The rate of interest often acts as a major regulator of consumption and investment within an economy. Changes in the interest rate often has an impact on the portfolio allocation of many investing firms as they try to maximize their returns and minimize their risks by making use of the best available financial instruments and adjusting their allocations between them accordingly. Central governments around the world use the interest rate a key tool of monetary policy to fight inflation and promote sustainable economic growth in their countries (Adekunle et al, 2016).

2.1 Exchange Rate

The exchange rate is a major macroeconomic indicator used to understand the overall performance of economies around the world due to its ability to show the value or purchasing power of one currency relative to another currency (Central Bank of Nigeria,2021). It also acts as a major link between the internal economy of a country and the international economy and is usually categorized in nominal or real terms. Nominal exchange rate primarily deals with the price of one currency relative to another currency while the real exchange rate between two currencies is the product of their nominal exchange rate and the ratio of prices between the two currencies. The real exchange rate acts as a major indicator of macroeconomic stability and it is a major determinant of the nature of trade between two or more countries. Due to its importance, most governments tend to manage their exchange rates either directly or indirectly, in order to ensure for a favourable trade environment to aid the growth of their economies (Williamson, 2009).

2.2 Inflation Rate

The rate of inflation is understood to mean the general rate of price increase of goods over a period of time. It is a major macroeconomic indicator and shows the performance of an economy over time (International Monetary Fund, 2023). Inflation rate targeting is often a key action of many central banks around the world who aim to ensure that their economy continues to grow at a sustainable pace without destabilizing the societal fabric. The inflation rate can be measured either through the cost-of-living index (CPI) or the cost of production index (PPI), with the former being the most common instrument for measuring the inflation rate. The CPI measures the changes in the price that consumers pay for their goods while the PPI measures the changes in the price that producers receive for their output. In countries where the CPI is significantly high, this has often coincided with a decrease in the standard of living of the populations within those countries (Huang & Liu, 2005).

2.3 Money Supply

This deals with the total amount of money in circulation in any economy. Economists typically measure money supply in different ways. These include M0, M1 and M2. M0: This is the monetary base and deals with all the currency in circulation and the reserve balances held by depository and non-depository institutions in the Central Bank. M1: This includes the monetary base, the balances held in checking accounts at depository institutions and traveller's cheques.

M2: This is a total of M1, small denomination time deposits and shares of retail money market mutual fund (The Federal Reserve, 2024). Money supply acts a key macroeconomic indicator which aids Central Banks in managing the rate of inflation within an economy and attaining sustainable economic growth (Investopedia, 2020). Money supply is usually regulated by the government so as to achieve certain macroeconomic objectives (Ugoani, 2022)

2.4 Gross Domestic Product (Gdp)

This is the value of the overall output of any economy in the forms of goods and services within a certain period. This is one of the most watched indicators of economic performance and it aids in determining how the economy of a country has performed over time or relative to other economies (Investopedia, 2024). Due to its nature, over time it has become a proxy for standard of living of a country's populace, even though this has no basis in any relevant economic theory. This has led to a great degree of emphasis being placed on it by academics and policy makers alike (Van den Bergh, 2009).

2.5 The Nigerian Exchange Group

The Nigerian Stock Exchange is the premier capital market in Nigeria and it acts as a rallying place for investors to meet those who would like to raise capital to fund their economic growth. It aids primarily in driving the economic growth of the country through capital allocation and provision of investment opportunities.

2.6 Research Gap

A number of empirical studies have been carried out on the effect of the macroeconomic variables on the stock market in the different countries in the literature but not many were found that considered all five proxies from a conceptual angle in Nigeria.

3. METHODOLOGY

3.1 Research design

This study took a conceptual approach on the effect of the macroeconomic factors on the performance of the Nigerian Capital Market. It also performed a systematic review of all related works in the literature. The aim was to identify any consensus of findings on the research questions and draw conclusions from there. It is, otherwise, a content study using the findings of other studies on the chosen variables of the topic.

4. RESULTS

There has been a significant number of studies to show 'the effect of macroeconomic variables on stock market performance' with varying results. Some of them will be reviewed in this section.

4.1 Effect of Interest Rates on Stock Market Performance in Nigeria

Augustine (2021), Ejem et al (2019) studied 'the effect of interest rate on stock market performance in Nigeria' and they uncovered the fact that the interest rate affects the stock market's performance positively in Nigeria.

Henry and Behiye (2021), Emmanuel (2019), James et al (2018), Emmanuel (2018), Harcourt (2016) investigated 'the effect of interest rate on the performance of the stock Market in Nigeria'. Their studies uncovered the fact that interest rate effects the stock market performance in Nigeria negatively and significantly. Cordelia and Sunday (2019), Cyprian (2017) evaluated 'the impact of interest rate on stock market performance in Nigeria'. Their studies discovered that the interest rate does not have significant impact on the stock market's performance in Nigeria.

James et al (2018) explored 'the effects of macroeconomic factors on stock market returns in Nigeria'. This study came to the conclusion that the interest rate has an effect on stock market returns in Nigeria which is insignificant and negative.

4.2 Effect of Inflation on Stock Market Performance in Nigeria

Augustine (2021), Ayinuola (2023), Cordelia and Sunday (2019), James et al (2018), Ejem et al (2019), Harcourt (2016), James et al (2018), Christian and Cordelia (2017) explored the 'effect of inflation on stock market performance in Nigeria'. Their studies noted that the rate of inflation has had a significant negative effect on the stock market's performance in Nigeria.

Emmanuel (2019) studied 'the effect of inflation on the performance of the Stock Market in Nigeria' and found that inflation rate has a positive but statistically insignificant effect on stock market performance in Nigeria. Emmanuel (2018), Cyprian (2017), Mike and Abraham (2014) investigated 'the macroeconomic determinants of stock market performance in Nigeria'. Their studies came to the conclusion that the inflation rate has no significant effect on the performance of the stock market in Nigeria.

4.3 Effect of Money Supply on Stock Market Performance in Nigeria

Augustine (2021), Henry and Behiye (2021), Adeleke et al (2020), Emmanuel (2019), Ayinuola (2023), Emmanuel (2018), Mike and Abraham (2014) investigated 'the effect of money supply on stock market performance in Nigeria'. Their studies discovered that money supply affects the stock market's performance positively in Nigeria.

Cyprian (2017) explored 'the effect of money supply on stock market performance in Nigeria'. The study found that money supply has no significant effect on the performance of the stock market in Nigeria.James et al (2018) examined 'the effects of money supply on stock market returns in Nigeria'. The study found that money supply has a significant negative effect on stock market returns in Nigeria.

4.4 Effect of Gross Domestic Product (GDP) on Stock Market Performance in Nigeria

Augustine (2021), Cordelia and Sunday (2019), James et al (2018), Ejem et al (2019), Harcourt (2016), Mike and Abraham (2014) studied 'the effects of gross domestic product on stock market performance in Nigeria'. Their studies uncovered the fact that gross domestic product (GDP) affects the stock market's performance positively and significantly in Nigeria.

Cyprian (2017) explored 'the effect of gross domestic product on stock market performance in Nigeria'. The study found that GDP does not significantly affect the performance of the stock market in Nigeria. Christian and Cordelia (2017) studied 'the impact of gross domestic product on stock market performance in Africa', namely Ghana, Kenya, South Africa and Nigeria. The study discovered that GDP effects the stock market's performance negatively and significantly in Nigeria.

4.5 Effect of Exchange Rate on Stock Market Performance in Nigeria

Augustine (2021), Ayinuola (2023) examined 'the effects of exchange rate on stock market performance Ain Nigeria'. The study discovered that exchange rate effects the stock market's performance positively in Nigeria. Henry and Behiye (2021), Christian and Cordelia (2017) studied 'the effect of exchange rate on stock market performance' proxied by stock return volatility in the Nigerian Stock Exchange Market. The study found that the exchange rate has a negative effect on the stock market returns in both the short run and the long run in Nigeria.

Emmanuel (2019), James et al (2018) explored 'the effect of exchange rate on the performance of the Stock Market in Nigeria' and they found that exchange rate has a positive but statistically insignificant effect on stock market performance in Nigeria.

Cordelia and Sunday (2019), Ejem et al (2019), Emmanuel (2018), Cyprian (2017), Harcourt (2016), Mike and Abraham (2014) studied 'the impact of exchange rate on stock market performance in Nigeria'. Their studies uncovered the fact that exchange rate does not have a significant effect on the stock market's performance in Nigeria.

5. DISCUSSION AND CONCLUSION

Generally, within the literature, it was found that gross domestic product (GDP) and money supply have notable effects on the performance of the stock market in Nigeria which are both positive and significant while the interest rate and the inflation rate have a significantly negative effect on the performance of the stock market in Nigeria. The exchange rate was found to have an insignificant effect on the performance of the stock market in Nigeria.

All the studies reviewed. with the exception of one (Augustine,2021), show that interest rate has either no impact on the development of the capital market or a negative and significant effect. In fact, majority of the works reviewed indicate that interest rate has a negative effect on the growth of the capital market. This can be explained by the fact that high interest rate is a disincentive to investment. People will rather invest in the money market where interest are high. High interest also reduces the value of bonds as bondholders are tempted to offload their bonds for high interest savings thereby depressing the bond market.

The same pattern is replicated in the case of inflation. All the studies except one (Emmanuel, 2019) indicate either no effect of negative and significant effect of inflation on the capital market development. Majority of the studies found a negative and significant relationship between inflation and the development of the capital market.

Findings on money supply had all the studies with the exception of that by James et al (2014) indicating a positive and significant relationship between aggregate money supply and capital market development. This is so because a genuine increase in the aggregate money supply indicates an increase in economic activities in the country. This is different from the situation in some countries where money supplied has increase due to mere printing of more money.

Findings on the effect of Gross Domestic Product (GDP) and the well-being of the capital market show a preponderance of positive and significant effect. Only two studies had findings that differ, one indicating no effect (Cyprian, 2017) and the other showing a negative effect (Christian & Cordelia, 2017). Curiously the two variant studies were conducted in the same year (2017).

The studies reviewed had divergent findings on the effect of exchange rate on the operation of the capital market. While four of the studies showed a positive and significant effect, 6 indicated no effect and 2 showed a negative and significant effect. This lack of consensus can be explained by the fact that the situation will depend of business of the companies whose stocks are traded in the capital market. Businesses in export goods with locally sourced raw materials will favour a high exchange, while those producing for the local market with high component of imported raw materials will be negatively affected.

A consensus was found in the studies reviewed with regards to the effect of four of the variables of macroeconomic environments and the well-being of the capital market in Nigeria. The four variables are interest rate, inflation, Gross Domestic Product and money supply. Gross Domestic Product and money supply were shown to have positive and significant effect on the progress of the Nigerian capital market. Inflation and interest rate, on the other hand were found to be negatively but significantly related to the capital market progress. There was no consensus on the findings on the effect of exchange rate on the development of the capital market in Nigeria

Macroeconomic variables have played a significant role in the growth of the Nigerian economy. Together, they constitute a very important precondition for industrial development and invariably, economic development (Collier and Guillemot, 1996). It is in the best interest of policymakers and the relevant stakeholders to ensure that these variables are managed in ways that support the growth of the economy rather than being impediments.

5.3 Recommendations

To ensure that the desired effects of the macroeconomic variables are realised, the following recommendations are made:

Interest rate should be managed through the Minimum Rediscount Rate (MRR) as this determine the rate that other fund givers will charge.

1. Inflation will be managed when interest rates and exchange rates are managed since most of the goods consumed in Nigeria have high foreign components
2. Government at the three tiers of Federal, State and local government should make concerted efforts to improve the environment of doing business by taming corruption and providing infrastructures like roads, railways, air transport, water, electricity and security. These will serve to increase business activities that will improve the GDP.
3. Improved business activities will lead to a genuine increase in money supply which will in turn impact positively on the capital market. The government also benefits from a vibrant capital market because about 50% of her borrowing is domestic from the capital market.

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